



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 7

Complete if Known

| | |
|----------------------|------------------|
| Application Number | 10/628,525 |
| Filing Date | July 28, 2003 |
| First Named Inventor | Peter L. Keeling |
| Art Unit | 1644 |
| Examiner Name | Not yet assigned |

Attorney Docket Number 15056-4

U. S. PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|--------------------|-----------------------|--|--------------------------------|--|---|
| | | Number-Kind Code ² (if known) | | | |
| SWL | A | US- 4,859,377 | 08-22-1983 | Shasha et al. | |
| | B | US- 5,137,819 | 08-11-1992 | Kilburn et al. | |
| | C | US- 5,202,247 | 04-13-1993 | Kilburn et al. | |
| | D | US- 5,302,523 | 04-12-1994 | Coffee et al. | |
| | E | US- 5,349,123 | 09-20-1994 | Shewmaker et al. | |
| | F | US- 5,512,459 | 04-30-1996 | Wagner et al. | |
| | G | US- 5,635,599 | 06-03-1997 | Pastan et al. | |
| | H | US- 5,643,756 | 07-01-1997 | Kayman et al. | |
| SWL | I | US- 5,648,244 | 07-15-1997 | Kuliopoulos et al. | |
| | | US- | | | |

FOREIGN PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T ⁶ |
|--------------------|-----------------------|---|--------------------------------|--|---|----------------|
| | | Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| | | | |
|--------------------|--|-----------------|---------|
| Examiner Signature | | Date Considered | 3/14/05 |
|--------------------|--|-----------------|---------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

| | | | | | |
|------------------------------|---|----|---|------------------------|------------------|
| Substitute for form 1449/PTO | | | | Complete if Known | |
| | | | | Application Number | 10/628,525 |
| | | | | Filing Date | July 28, 2003 |
| | | | | First Named Inventor | Peer L. Keeling |
| | | | | Art Unit | 6144 |
| | | | | Examiner Name | Not yet assigned |
| Sheet | 2 | of | 7 | Attorney Docket Number | 15056-4 |

| NON PATENT LITERATURE DOCUMENTS | | | | | |
|---------------------------------|-----------------------|---|--|--|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | | | T ² |
| <i>SWL</i> | J | BABA, T. et al., "Identification, cDNA Cloning, and Gene Expression of Soluble Starch Synthase in Rice (<i>Oryza sativa</i> L.) Immature Seeds" (1993), <i>Plant Physiol.</i> 103:565-573 | | | |
| | K | BABA, T. et al "Sequence Conservation of the Catalytic Regions of Amylolytic Enzymes in Maize Branching Enzyme-I" (1991) <i>Biochem. Biophys. Res. Comm.</i> 181(1):87-94 | | | |
| | L | BHATTACHARYYA, M. et al. "The Importance of Starch Biosynthesis in the Wrinkled Seed Shape Character of Peas Studied by Mendel" (1993) <i>Plant Mol. Biol.</i> 22:525-531 | | | |
| | M | BOYER, C. et al. "Multiple Forms of (1 - 4)-a-D-GLUCAN-6-Glycosyl Transferase from Development Zea Mays L. Kernels" (1978) <i>Carbohydrate Research</i> 61:321-334 | | | |
| | N | BROEKHUIJSEN, M. et al. "Secretion of heterologous proteins by <i>Aspergillus niger</i> : Production of active..." (1993) <i>Journal of Biotechnology</i> 31:135-145 | | | |
| | O | BROWNER, M. et al. "Human muscle glycogen synthase cDNA sequence: A negatively charged protein with an asymmetric char..." (3/1989) <i>Proc. Natl. Acad. Sci. USA</i> 86:1443-1447 | | | |
| | P | CHEN, L et al. "Improved Adsorption to Starch of a B-Galactosidase Fusion Protein Containing the Starch-Binding Domain from <i>Aspergillus</i> ..." (1991) <i>Biotechnol. Prog.</i> 7:225-229 | | | |
| | Q | DANG, P. et al. "Maize Leaf and Kernel Starch Synthases and Starch Branching Enzymes" (1988) <i>Phytochemistry</i> 27(5):1255-1259 | | | |
| | S | DENYER, K. et al. "Identification of multiple isoforms of soluble and granule-bound starch synthase in development wheat endosperm" (1995) <i>Plant</i> 196:256-265 | | | |
| <i>SWL</i> | T | DENYER, K. et al. "The purification and characterisation of the two forms of soluble starch synthase from developing pea embryos" (1992) <i>Planta</i> 186:609-617 | | | |

| | | | |
|--------------------|------------|-----------------|---------|
| Examiner Signature | <i>SWL</i> | Date Considered | 3/14/05 |
|--------------------|------------|-----------------|---------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

3

of

7

Complete if Known

| | |
|------------------------|------------------|
| Application Number | 10/628,525 |
| Filing Date | July 28, 2003 |
| First Named Inventor | Peer L. Keeling |
| Art Unit | 6144 |
| Examiner Name | Not yet assigned |
| Attorney Docket Number | 15056-4 |

Sheet

3

of

7

Attorney Docket Number

| NON PATENT LITERATURE DOCUMENTS | | | | |
|---------------------------------|-----------------------|---|--|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | | T ² |
| <i>SWL</i> | U | DENYER, K. et al. "Soluble isoforms of starch synthase and starch-branched enzyme also occur within starch granules in developing..." (1993) The Plant Journal 4(1):191-198 | | |
| | V | DRY, I. et al. "Characterization of cDNAs encoding two isoforms of granule-bound starch synthase which show differential expression..." (1992) The Plant Journal 2(2):193-202 | | |
| | W | EDWARDS, A. et al. "Evidence that a 77-Kilodalton Protein from the Starch of Pea Embryos Is an Isoform of Starch Synthase That Is Both..." (1996) Plant Physiol. 112:89-97 | | |
| | X | FRYDMAN, R. et al. "Soluble Enzymes Related to Starch Synthesis" (1964) Biochem. and Biophys. Res. Comm. 17(4):407-411 | | |
| | Y | FURUKAWA, K. et al. "Role of the Conserved Lys-X-Gly-Gly Sequence at the ADP-glucose-binding Site in..." (11/15/1993) The Journal of Biological Chemistry 268(32):23837-23842 | | |
| | Z | FURUKAWA, K. et al. "Identification of Lysine 15 at the Active Site in Escherichia coli Glycogen Synthase" (2/5/1990) The Journal of Biological Chemistry 265(4):2086-2090 | | |
| | AA | GODDIJIN, O. et al. "Plants as bioreactors" (9/1995) Trends in Biotechnology 13(9):379-387 | | |
| | AB | HOVENKAMP-HERMELINK, J. et al. "Isolation of an amylose-free starch mutant of the potato (Solanum tuberosum L.)" (1987) Theor. Appl. Genet. 75:217-221 | | |
| | AC | JENNER, C. et al. "Thermal Characteristics of Soluble Starch Synthase from Wheat Endosperm" (1995) Aust. J. Plant. Physiol. 22:703-709 | | |
| <i>SWL</i> | AD | KEELING, P. et al. "Effect of Temperature on Enzymes in the Pathway of Starch Biosynthesis in Developing Wheat and Maize Grain" (1994) Aust. J. Plant. Physiol. 21:807-827 | | |

| | | | |
|--------------------|------------|-----------------|----------------|
| Examiner Signature | <i>SWL</i> | Date Considered | <i>3/14/05</i> |
|--------------------|------------|-----------------|----------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

| | | | | |
|---------|--|------|------------------------|------------------|
| Sheet 4 | | of 7 | Attorney Docket Number | 15056-4 |
| | | | Application Number | 10/628,525 |
| | | | Filing Date | July 28, 2003 |
| | | | First Named Inventor | Peer L. Keeling |
| | | | Art Unit | 6144 |
| | | | Examiner Name | Not yet assigned |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|--------------------|-----------------------|---|----------------|
| <i>SL</i> | AE | KEELING, P. et al. "Elevated temperature reduces starch deposition in wheat endosperm by reducing the activity of soluble starch synthase" (1993) <i>Planta</i> 191:342-348 | |
| | AF | KIEL, J. et al. "Molecular cloning and nucleotide sequence of the glycogen branching enzyme gene (glgB) from <i>Bacillus</i> ..." (1991) <i>Mol. Gen. Genet.</i> 230:136-144 | |
| | AG | KIEL, J. et al. "Cloning and expression of the branching enzyme gene (glgB) from the cyanobacterium <i>Synechococcus</i> sp. PCC7942 in <i>Escherichia coli</i> " (1989) <i>Gen.</i> 78:9-17 | |
| | AH | KIRIHARA, J. et al. "Isolation and sequence of a gene encoding a methionine-rich 10-kDa zein protein from maize" (1988) <i>Gen.</i> 71:359-370 | |
| | AI | KOBMANN, J. et al. "Cloning and expression analysis of a potato cDNA that encodes branching enzyme: evidence for co-expression of starch..." (1991) <i>Mol. Gen. Genet.</i> 230:39-44 | |
| | AJ | KUMAR, A. et al. "Biosynthesis of Bacterial Glycogen" (12/5/1986) <i>The Journal of Biological Chemistry</i> , 261(34):16256-16259 | |
| | AK | KUSNADI, A. et al. "Functional starch-binding domain of <i>Aspergillus</i> glucoamylase I in <i>Escherichia coli</i> " (1993) <i>Gene</i> 127:193-197 | |
| | AL | LEUNG, P. et al. "Cloning and Expression of the <i>Escherichia coli</i> glgC Gene from a Mutant Containing an ADPglucose..." (7/1986) <i>J. of Bacteriology</i> , 167(1):82-88 | |
| | AM | MCCORMICK, M. et al. "Purification and S-Tag detection of CBD fusion proteins" (1997) <i>inNovations</i> 7:12-15 | |
| <i>SL</i> | AN | MACDONALD, F. et al. "Partial Purification and Characterization of Granule-Bound Starch Synthases from Normal and Waxy Maize" (1985) <i>Plant Physiol.</i> 8:849-852 | |

| | | | |
|--------------------|-----------|-----------------|---------|
| Examiner Signature | <i>SL</i> | Date Considered | 3/14/05 |
|--------------------|-----------|-----------------|---------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



PTO/SB/08B (08-03)

Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Complete if Known

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

5

of

7

| | |
|------------------------|------------------|
| Application Number | 10/628,525 |
| Filing Date | July 28, 2003 |
| First Named Inventor | Peer L. Keeling |
| Art Unit | 6144 |
| Examiner Name | Not yet assigned |
| Attorney Docket Number | 15056-4 |

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

NON PATENT LITERATURE DOCUMENTS

| | | | |
|--------------------|-----------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| Scul | AO | MACDONALD, F. et al. "Solubilization of the Starch-Granule-Bound Starch Synthase of Normal Maize Kernels" (1983) Plant Physiol. 73:175-178 | |
| | AP | MARSHALL, J. et al. "Identification of the Major Starch Synthase in the Soluble Fraction of Potato Tubers" (7/1996) the Plant Cell 8:1121-1135 | |
| | AQ | MATSUMOTO, A. et al. "A Kinetic Study of the Interaction between Glycogen and Neurospora crassa Branching Enzyme" (1990) J. Biochem. 107:123-126 | |
| | AR | MONSMA, A. et al. "New pBAC transfer plasmids for baculovirus expression of CBD fusion proteins" (1997) InNovations 7:8-11 | |
| | AS | MONSMA, A. et al. "BacVector-3000: An engineered baculovirus designed for greater protein stability" (1997) InNovations 7:16-24 | |
| | AT | MU, C. et al. "Association of a 76 kDa polypeptide with soluble starch synthase I activity in maize (cv B73) endosperm" (1994) The Plant Journal 6(2):151-159 | |
| | AU | MU-FORSTER, C. et al. "Physical Association of Starch Biosynthetic Enzymes with Starch Granules of Maize Endosperm" (1996) Plant Physiol. 111:821-829 | |
| | AV | NAKAMURA, Y. et al. "Nucleotide Sequence of a cDNA Encoding Starch-Branching Enzyme, or Q-Enzyme I, from Rice Endosperm" (1992) Plant Physiol. 99:1265-1266 | |
| | AW | NAKAMURA, Y. et al. "Purification of two forms of starch branching enzyme (Q-enzyme) from developing rice endosperm" (1992) Physiologia Plantarum 84:329-335 | |
| Scul | AX | NOVY, R. et al. "New pET expression vectors generate fusion proteins with cellulose binding domains" (1981) InNovations 7:4-7 | |

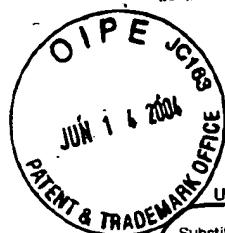
| | | | |
|--------------------|--|-----------------|---------|
| Examiner Signature | | Date Considered | 3/14/05 |
|--------------------|--|-----------------|---------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

6

of

7

| Complete if Known | |
|------------------------|------------------|
| Application Number | 10/628,525 |
| Filing Date | July 28, 2003 |
| First Named Inventor | Peer L. Keeling |
| Art Unit | 6144 |
| Examiner Name | Not yet assigned |
| Attorney Docket Number | 15056-4 |

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| <i>SWL</i> | AY | OKITA, T. et al. "Biosynthesis of Bacterial Glycogen" (7/10/1981) The Journal of Biological Chemistry 256(13):6944-6952 | |
| | AZ | POLLOCK, C. et al. "The Citrate-Stimulated Starch Synthase of Starchy Maize Kernels: Purification and Properties" (1980) Archives of Biochemistry and Biophysics 204(2):578-58 | |
| | BA | ROWEN, D. et al. "GLC3 and GHA1 of <i>Saccharomyces cerevisiae</i> Are Allelic and Encode the glycogen Branching Enzyme" (1/1992) Molecular and Cellular Biology 12(1):22-29 | |
| | BB | SALEHUZZAMAN, S. et al. "Cloning, partial sequencing and expression of a cDNA coding for branching enzyme in cassava" (1992) Plant Molecular Biology 20:809-819 | |
| | BC | SHIMADA, H. "Antisense regulation of the rice waxy gene expression using a PCR-amplified fragment of the rice genome reduces..." (1993) Theor. Appl. Genet. 86:665-672 | |
| | BD | SHURE, M. et al. "Molecular Identification and Isolation of the Waxy Locus in Maize" (11/1983) Cell 35:225-233 | |
| | BE | SMITH, A. "Major differences in isoforms of starch-branching enzyme between developing embryos of round- and wrinkled-seeded peas (<i>Pisum sativum</i> ..." (1988) Planta 175:270-279 | |
| | BF | SHOSEYOV, O. et al. "Cellulose binding domains - A novel fusion technology for efficient, low cost purification and immobilization of..." (8/1997) InNovations 7:1-3 | |
| | BG | SINGH, B. et al. "Starch Branching Enzymes from Maize" (1985) Plant Physiol. 79:34-40 | |
| <i>SWL</i> | BH | SVENSSON, B. et al. "Sequence homology between putative raw-starch binding domains from different starch-degrading enzymes" (1989) Biochem. J. 264:309-311 | |

| | | | |
|--------------------|------------|-----------------|----------------|
| Examiner Signature | <i>SWL</i> | Date Considered | <i>3/14/05</i> |
|--------------------|------------|-----------------|----------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known

| | | | | | |
|--|---|----------------------|------------------|------------------------|---------|
| Substitute for form 1449/PTO | | | | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i> | | Application Number | 10/628,525 | | |
| | | Filing Date | July 28, 2003 | | |
| | | First Named Inventor | Peer L. Keeling | | |
| | | Art Unit | 6144 | | |
| | | Examiner Name | Not yet assigned | | |
| Sheet | 7 | of | 7 | Attorney Docket Number | 15056-4 |

| NON PATENT LITERATURE DOCUMENTS | | | | |
|---------------------------------|-----------------------|---|--|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | | T ² |
| <i>SL</i> | BI | TAKAHASHI, T. et al. "Different Behavior towards Raw Starch of Three Forms of Glucoamylase from a Rhizopus Sp." (1985) J. Biochem. 98:663-671 | | |
| | BJ | TSAI, C. "The Function of the Waxy Locus in Starch synthesis in Maize Endosperm" (1974) Biochemical Genetics (11(2):83-96 | | |
| | BK | TYYNELA, J. et al. "An analysis of soluble starch synthase isozymes from the developing grains of normal and shx cv. Bomi Barley..." (1993) Physiologia Plantarum 89:835-841 | | |
| | BL | VALVEKENS, D. et al. "Agrobacterium tumefaciens-mediated transformation of Arabidopsis thaliana root explants by using..." (8/1988) Proc. Natl. Acad. Sci. USA 85:5536-5540 | | |
| | BM | VAN DER LEIJ, F. et al. "Complementation of the amylose-free starch mutant of potato (Solanum tuberosum.) by the gene encoding..." (1991) Theor. Appl. Genet. 82:289-295 | | |
| | BN | VISSEER, R. et al. "Inhibition of the expression fo the gene for granule-bound starch synthase in potato by antisense constructs" (1991) Mol. Gen. Genet. 225:289-296 | | |
| | BO | VISSEER, R. et al. "Molecular Cloning and Partial Characterization of the Gene for Granule-bound Starch Synthase from a Wildtype and an..." (1989) Plant Science 64:185-192 | | |
| | BP | VON HEIJNE, G. et al. "CHLPEP - A Database of Chloroplast Transit Peptides" (1991) Plant Molecular Biology Reporter 9(2):104-126 | | |
| | BQ | VOS-SHEPERKEUTER, G. et al. "Immunological Comparison of the Starch Branching Enzymes from Potato Tubers and Maize Kernels" (1989) Plant Physiol 90:75-84 | | |
| <i>SL</i> | BR | ZHANG, W. et al. "Primary structure of rabbit skeletal muscle glycogen synthase deduced from cDNA clones" (1989) The BASEB Journal 3:2532-2536 | | |

| | | | |
|--------------------|-----------|-----------------|----------------|
| Examiner Signature | <i>SL</i> | Date Considered | <i>3/14/05</i> |
|--------------------|-----------|-----------------|----------------|

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.